

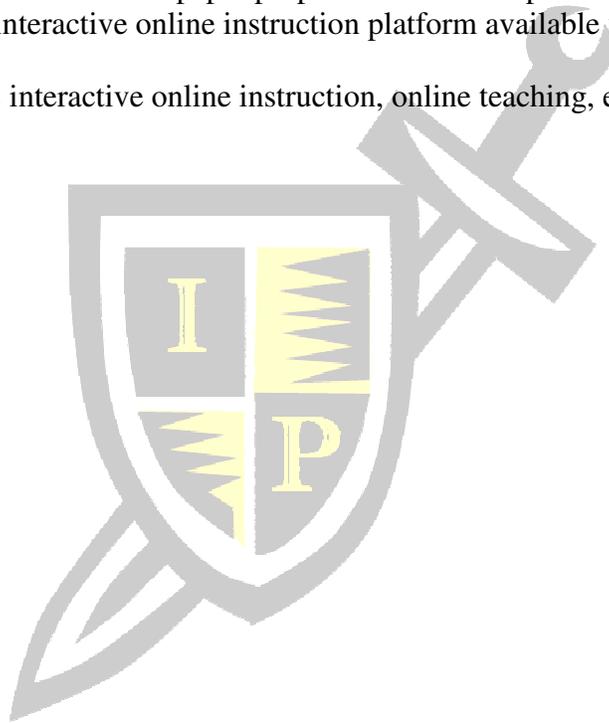
## **Enhancing the online class: Effective use of synchronous interactive online instruction**

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### **ABSTRACT**

The delivery of instruction through an online platform has become more prevalent, popular, and available every year. While students are taking advantage of the convenience provided by online instruction, their instructors are grappling with presenting, in an online format, the depth and richness of academic content without creating long, written lectures or heavily annotated PowerPoints. This paper proposes methods of presenting content through the use of the synchronous interactive online instruction platform available within online courses.

Keywords: synchronous interactive online instruction, online teaching, e-learning



## INTRODUCTION

Institutes of higher education consider the delivery of online instruction critical to the survival of their institutions as these classes have become the preferred mode of instruction for many students (Huang, 2012; Olaniran, 2006; Pullen & Snow, 2007; Sherer & Shea, 2011; Waits & Lewis, 2003). Online classes offer many conveniences to students: accessibility, overcoming geographical difficulties, and flexibility, allowing students to attend class around their personal schedules (Huang, 2012, McBrien et al, 2009). However, students and teachers alike state that their online courses lack the interaction typically found in traditional, face-to-face classrooms (Jahn, 2012; McBrien et al, 2009). The dilemma, then, is how to engage the student, create academic excitement, and deliver instruction effectively through the online platform.

Online classes deliver content through various modalities: web pages, tutorials, quizzes, written lectures, PowerPoint presentations, and recorded lectures (Pullen & Snow, 2007). Online classes also offer the opportunity for computer-mediated communication (CMC) through email, instant messaging, announcements, and discussion chats. All of these are asynchronous in nature and are characterized by lapses in time between the initial posting and the subsequent response. Synchronous communication, on the other hand, provides an opportunity for participants to interact, respond, react, ask questions in real time and receive immediate feedback (Grant, 2007; Grogan 2015).

The use of the synchronous capabilities of the learning management system (LMS) of the online class have effectively been used for video-conferencing, for meeting with students informally and having open chats, or for virtual office hours (Grant, 2007; Olaniran, 2006; Tabak, 2014). However, the instructional capability of the synchronous platform may be utilized to deliver instruction and facilitate learning with a minimum acquisition of additional technical skills.

Synchronous interactive online instruction (SIOI) overcomes limitations of space and distance while providing a format through which the instructor may, in real time, highlight or emphasize portions of the course content. Of course, time is a factor in the delivery of synchronous instruction, since it requires that all participants be in attendance at the same time, compromising the time flexibility inherent in a typical online class. This difficulty is not insurmountable since most LMS have recording capabilities built in, allowing students to listen at their convenience, though this makes the session asynchronous in nature for them. The experience of the author, however, is that if the SIOI sessions are appropriately designed and scheduled, most students will make an effort to attend due to the value of the input, interaction, and feedback. The energy of the instructor is easily transmitted through the synchronous platform, engaging students, approximating more closely the ambiance of a traditional classroom, which is still for most instructors their most familiar environment and, for students, a place for immediate feedback and learning.

## TECHNICAL ISSUES

Most online classes have the built in capability for student and instructor to meet online. Conferencing programs such as Class Live Pro, Blackboard Collaborate and Elluminate Live have been available and in use for years. The utilization of a synchronous platform does require a certain level of proficiency of technological skills both on the part of the instructor as well as the student. The synchronous platform does contain various tools which need to be mastered by

participants, particularly the teacher, such as the presentation window to display course content; the video window to view the speaker; tools to allow students to speak and be seen during the session; participant list of names; chat box to allow students to write their questions/comments; polling/survey tool; the raised hand tool, and the ability to record a session so it may be archived and available at a later time. Most institutes of higher education offer classes on using the SIOI feature of their particular LMS for instructors and students alike. The important thing to remember, however, is that the instructor does not need to master the use of all of these tools before they offer synchronous instruction for the first time. It is possible to conduct online instruction with knowledge solely of the presentation window, the chat box, the raised hand tool and recording features, with mastery of other features to come as time and interest permit.

### **TIME CONSTRAINTS – PREPARATION**

Oftentimes, the perception is that presenting instruction in a synchronous fashion is time-consuming due to the amount of preparation needed (Angelino, Williams & Natvig, 2007; Hirumi, 2003). However, the use of a template that can be used in various courses and reused in the future can minimize preparation time required. For example, PowerPoints and videos used in one SIOI session can be utilized in future classes or even in other courses with similar content, for although some points of emphasis may require some modification, the majority of the academic content will remain consistent.

### **ENSURING STUDENT ENGAGEMENT**

Of course, SIOI sessions will only prove effective if the students participate. The student must feel that devoting a specific hour of their time is highly relevant to him as an individual learner. This requires that the session be more than just “office meetings” or “open chats” during which time an instructor is available for consultation. For SIOI to fulfill its capability of delivering instruction, a specific lesson plan is required and the session needs to be focused on topics directly related to course objectives.

Some strategies which ensure greater attendance at synchronous sessions include scheduling the SIOI sessions before class begins or early in the class. This allows the students time to rearrange their schedule so they can attend. It is important to advertise the schedule repeatedly through the use of emails, course announcements, printable course schedules, and newsletters. It is also beneficial to provide the session as an alternative to another assignment in the class, for example, students who attend may have their follow up discussion posts waived for the week.

### **PREPARING CONTENT FOR SYNCHRONOUS ONLINE DELIVERY**

Synchronous online sessions provide the instructor with opportunities to clarify, emphasize, and facilitate dialogue regarding difficult concepts in the course. The teacher can highlight connections between different concepts and present new research and/or material pertinent to the class. Peripherally, yet just as important, meeting face-to-face online creates a sense of connection with the instructor and fosters a sense of community with other members of the class, thereby further engaging and motivating the student (Moore et al, 2009).

SIOI sessions need to be specific, relevant to the course, and should provide an opportunity for faculty to elaborate on academic content. Effective SIOI sessions need to contain visual input, accomplished readily through interactive PowerPoint (PPT) presentations, however it is vital to supplement the PPT with a live running commentary by the professor. PPT slides, therefore, should contain as few words as possible and could include graphics or a background. The SIOI may also include video-clips and/or visits to websites and the entire session should be interspersed with course relevant questions which are discussed online, polling questions, pop quizzes (session specific), and informal surveys. Effective SIOI sessions end with a summation and with time allotted to questions from the students that are related to the session specifically or the course generally, all questions being answered in real time. SIOI sessions, therefore, are content and structure based, supplemented by instructor dialogue, and promote student interaction. Preplanning is crucial and significant. The success of the SIOI live session depends highly on the professor's preparation prior to the actual session and on his ability to connect the session to items of relevance to the student's learning (Ward, Peters, & Shelley, 2010).

### **ADDITIONAL SIOI BEST PRACTICES**

Some practices which are effective even though they are not focused on the academic content of the course include: greet the students as they arrive at the beginning of the session; have a slide in which students are greeted and reminded of the technical requirements of the course (muting microphones; utilizing audio input); conduct the sessions at a time when most students will be free (taking into consideration student employment hours); start and end the SIOI sessions on time; utilize wait time during SIOI in the same manner as when teaching on-site; link the end of the current session to the topic of the next session; and record the session so that students who are unable to attend can listen at their convenience.

### **TIME CONSIDERATION FOR SESSIONS**

While some warn against the use of synchronous online sessions too early in the course or in courses of short duration due to lack of student technical training (Olaniran, 2000-see article for citation), however the sophistication and expertise of most digital natives attending online classes today exposes the need for training more on the part of the instructor than for the student. The author effectively conducts a SIOI the first night of an online class which is consistently attended by 75-95% of the class. At this session, a detailed overview of the course is presented and all course assignments are discussed in detail. The students are notified of the session through emails and newsletters at least two weeks before the course begins and are compensated for their time attending by waiving one of their discussions posts for the week. Synchronous instructional sessions should be longer than 30 minutes (Tabak, 2014) but less than 2 hours in length (Groen, 2008). A session of 60 to 75 minutes in which specific course content is paraphrased, highlighted, explained and applied, with an additional 10-20 minutes available for additional questions would prove satisfactory.

### **SUMMATION**

The shift from teaching in a traditional, face-to-face environment to teaching through an online learning system requires instructors to make a shift in their mode of delivery while still ensuring that the quality of the teaching and the rigor of the content does not suffer. Through the use of synchronous interactive online instruction, teachers may engage students and enhance the quality of student learning. This paper has proposed that the regular, scheduled use of the SIOI component of the online class be utilized to present content and focus on particularly complex concepts in the class, while increasing instructor presence in the course and structuring opportunities for teacher-student interactions. Early and frequent notification of synchronous sessions and the use of streamlined PowerPoint presentations which allow for extended commentary would enhance the online instructional experience and provide students with immediate feedback and a forum in which to clarify salient course content through discussion. A peripheral benefit of consistent use of synchronous sessions would be increased instructor presence and student online engagement.

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